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ABSTRACT

This bibliography lists resources for the technical writing teacher, classified according to the following categories: professional organizations and periodicals concerned with technical writing and with such related areas as business communication and basic composition; conferences, meetings, and institutes on technical writing, held in 1975, 1976, and 1977; continuing and completed bibliographies on technical writing; selected articles on teaching technical writing; standard works on technical writing; and materials for general orientation. A brief supplementary statement discusses the field of technical writing and notes difficulties faced by the beginning teacher of technical writing. (GW)

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# A BIBLIOGRAPHY OF RESOURCES FOR BEGINNING TEACHERS OF TECHNICAL WRITING

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For several reasons, technical writing can be a difficult field for new teachers to get into. Although the subject matter is neither abstruse nor voluminous, the field itself is both diffuse and divided. In addition, its academic history as the bastard child of English departments has reinforced an unproductive attitude that technical writing is the dullest kind of nuts-and-bolts instruction, an undesirable teaching assignment that anyone can handle but no one with any academic self-respect wants.

This brief paper presents a bibliography which will provide the beginning teacher not only with some useful classroom material but also with an understanding of technical writing as a field with a literature, a pedagogical tradition, and a future as a cohesive area of study. But first, the difficulties.

Technical writing is a diffuse field, or perhaps a better word is interdisciplinary. As a service course usually offered through English departments, technical writing is directed to students in many programs of study, from pre-law through chemical engineering to wildlife management. Moreover, the conceptual content of technical writing courses draws from such diverse sources as communication theory, logic, rhetoric, grammar, scientific method, visual design, and organizational management.

This diffuseness is exacerbated by the lack of theory, a lack which has cost technical writing in academic respectability. In fact, however, the relationship between technology and communication, when looked at from the theoretical perspectives of cultural history, media studies (including the medium of language), rhetoric, and social science, becomes a rich area, deserving of study on the graduate level. With the increasing interest in technical writing at the undergraduate level, graduate programs should develop and theory evolve. This theoretical foundation is the broader field of technical communication.

Technical writing, as it now stands, is also a divided field, divided between those for whom technical communication is a profession and those for whom it is an ancillary (but increasingly important) skill. Much of the literature on technical writing is intended for the professional technical communicator--who may be a manager of a publications department, a public relations specialist, a training manager, or a media producer. Management theory and sophisticated media techniques are useful and relevant to such people. Most of the teaching that goes on in college technical writing courses, however, must be geared to meeting the needs of the technical person whose professional role requires communication with other people, in their professional roles. Because these people need to learn basic skills and attitudes, much of the literature of interest to the professional communicator

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will be irrelevant to them. The teacher, obviously, needs to understand the needs of the students and the biases of the resources.

The following list of resources covers organizations and publications, conferences, and printed material. It is intended to demonstrate the breadth of the field called technical writing; to help the new teacher understand students' needs and design a course that responds to them; and to provide a preliminary appreciation of the issues and problems that constitute the developing field of technical communication.

The list of professional organizations and periodicals includes all those directly concerned with technical writing and several which address related interests, such as business communication and basic composition. The Association of Teachers of Technical Writing is certainly the most useful for the beginning teacher. The Society for Technical Communication is the professionals' society; its annual meeting now has a section on education and training, and a growing number of teachers are active members. The two other major journals in the field, which publish articles on both practice and pedagogy, are the journal of the IEEE Group on Professional Communication and the Journal of Technical Writing and Communication.

The growing number of conferences and institutes, of which only a sampling is listed, demonstrates the wide interest in technical writing. The University of Michigan conference on teaching and the sessions at CCCC and NCTE are specifically concerned with pedagogy. The others, intended primarily as in-service training for professional communicators, can help the teacher who has never worked in industry to understand the problems and methods which concern the practitioners.

The listing of printed material consists of bibliographies, selected articles on teaching, standard works on technical writing, and material for general orientation. Most of the items were published after 1965, but the bibliographies listed will cover earlier items. The compilation is by no means offered as comprehensive; rather it is an introductory selection of material which many teachers have found particularly useful.

The selected articles on pedagogy draw from a burgeoning body of material. They were selected for their continuing usefulness and their attention to the problems and needs of the beginning teacher. Many of the authors are teachers who have influenced the design of current programs, courses, and texts.

A somewhat broader scope is presented in the list of standard works which include some classic handbooks and several anthologies; of these the NCTE's Teaching of Technical Writing is probably the most useful place for the new teacher to start.

The final listing provides a much broader orientation and some lighter reading, particularly for those new teachers with little or no background in science or technology. These works should give some appreciation for the methods and interests of the future scientists and technicians who will be sitting in the classroom.

One whole realm of resources cannot be represented here but must be mentioned. It consists of the body of literature which is technical writing: instruction manuals, government studies, local land use plans, industrial reports, technical advertising, computer documentation, textbooks, articles in scientific and semi-technical journals, and so on. Such actual examples, as well as the people who work in government and industry and who teach in technical and scientific fields, are important resources for assessing needs, understanding students, and gaining the kind of experience with actual problems which makes for the best teaching.

ORGANIZATIONS AND PERIODICALS FOR TECHNICAL WRITING AND COMMUNICATION

American Business Communication Association
317-B David Kinley Hall, University of Illinois, Urbana, IL 61801
Journal of Business Communication, quarterly; ABCA Bulletin, quarterly
annual membership $20 (includes $16 for journals)

American Society for Engineering Education
Suite 400, One Dupont Circle, Washington, D.C. 20036
Engineering Education, monthly, May-Oct.; Engineering Education News, monthly; division newsletter (e.g., Liberal Studies)
annual membership $19 (includes all subscriptions)

Association of Teachers of Technical Writing
Prof. John A. Walter, Department of English, University of Texas, Austin, TX 78712
The Technical Writing Teacher, three issues a year
annual membership $3 (includes subscription)

Council of Communication Societies
P. O. Box 1074, Silver Spring, Maryland 20910
Communication Notes
annual subscription $12; $6 to members of CCS organizations (ABCA, ATA, ICC, ICA, STC, SFL, SCA)

Institute of Electrical and Electronics Engineers, Group on Professional Communications
345 East 47th St., New York, NY 10017
IEEE Transactions on Professional Communication, quarterly
annual group membership $6, plus IEEE dues

Institute of Scientific and Technical Communicators Ltd.
17 Bluebridge Avenue, Brookman's Park, Hatfield, Herts, AL 9 7 RY, England
annual membership £6

Journal of Technical Writing and Communication
Baywood Publishing Company, Inc., 43 Central Drive, Farmingdale, NY 11735
Prof. Jay R. Gould, Exec. Editor, Department of Language and Literature, Rensselaer Polytechnic Institute, Troy, NY 12181
annual subscription $33

National Council of Teachers of English
1111 Kenyon Road, Urbana, IL 61801
College Composition and Communication, quarterly, $5; Public Doublespeak Newsletter, quarterly, $2.50
annual membership $15

Society for Technical Communication
1010 Vermont Avenue, NW, Washington, D.C. 20005

Technical Communication, quarterly journal; Intercom, bimonthly newsletter; local chapter newsletter
annual membership $20 (includes subscriptions), enrollment fee $5

CONFERENCES, MEETINGS, INSTITUTES ON TECHNICAL COMMUNICATION

Conference on College Composition and Communication
28th annual meeting, 31 March-2 April, Kansas City
Usually some session, seminar, panel on technical writing

Massachusetts Institute of Technology, Communicating Technical Information
20th year, 9-13 August 1976, $450
Prof. Robert R. Rathbone, In Charge
Office of the Summer Session, Room E19-356, MIT, Cambridge, MA 02139

National Council of Teachers of English
66th annual convention, 25-27 November 1976, Chicago
Preconvention study groups, papers, panels on technical writing

Queen's University, Practical Communication 1976
2-7 May 1976, $300
Prof. David Pilfold, Director
Jackson Hall, Queen's Univ., Kingston, Ontario, Canada K7L 3N6

Rensselaer Polytechnic Institute, Technical Writers' Institute
25th year, 13-17 June 1977, $325
Prof. B. F. Hammet, Director
RPI, Troy, NY 12181

Society for Technical Communication, International Technical Communications Conference
24th ITCC, 11-14 May 1977, Chicago, $75 (members)
Curtis T. Youngblood, Exec. Dir., STC, 1010 Vermont Ave., Washington, D.C. 20005

UCLA, Professional/Technical Writing Workshop
27-31 October 1975, $375
P. O. Box 24902, Continuing Education in Engineering and Mathematics, UCLA Extension, Los Angeles, CA 90024

University of Michigan, Teaching Technical and Professional Writing
3rd year, 8-12 August 1977, $250
Profs. J. C. Mathes and D. W. Stevenson, Chairmen
University of Michigan Extension Service, Conferences and Institutes, 412 Maynard St., Ann Arbor, MI 48109

University of Michigan, Written Communication for Engineers, Scientists, and Technical Writers
19th year, 26-30 July 1976, $325
Prof. T. M. Sawyer, Chairman
Engineering Summer Conferences, 400 Chrysler Center, North Campus, University of Michigan, Ann Arbor, MI 48105

BIBLIOGRAPHIES ON TECHNICAL WRITING

Continuing Bibliographies

Annual bibliography of technical writing edited by Donald H. Cunningham, published in each fall issue of The Technical Writing Teacher, beginning with Fall 1975. Covers books and over 100 periodicals, entries classified

as bibliographies; books; reviews of books; teaching; style; articles, papers, reports, manuals and catalogs; abstracts; proposals; application letters and resumes; editing; graphics; speech; the profession.

"Recent and Relevant," quarterly bibliography on technical communication edited by Jeffrey L. Hibbard, published in each issue of Technical Communication beginning with first quarter 1976. The Bibliography Committee of the Society for Technical Communication monitors some 60 periodicals and abstracts articles of interest to the practicing professional; categories include diction, editing, house journals, management, presentations, printing and production, rhetoric, semantics, style, teaching, translation.

"Books in Technical Writing and Communication," prepared as a class and reference list; titles added "from time to time." Journal of Technical Writing and Communication, first quarter 1975, 69-70, and second quarter 1976, 181-182.

Completed Bibliographies

Cunningham, Donald H. "Bibliographies of Technical Writing Material." The Technical Writing Teacher, Winter 1974, 9-10. Attempt to include every published or widely distributed bibliography to date; 5 books, 10 articles.

Cunningham, Donald H. "Books on Police Writing." College Composition and Communication, May 1972, 199-201. Six books are described; more complete listing in Vivienne Hertz and Cunningham's "Bibliography: Police Report Writing," Police Chief, August 1971, 44, 49-50.

Cunningham, Donald H. and Vivienne Hertz. "An Annotated Bibliography on the Teaching of Technical Writing." College Composition and Communication, May 1970, 177-186. Entries classified as definitions and distinctions (24 entries), course descriptions and specific assignments (30), and resource materials (13).

McClure, Lucille. "Two Bibliographies: Technical Writing Books in Print; Phototypesetting." IEEE Transactions on Engineering Writing and Speech, December 1965, 67-70. The first list has 59 selected books on technical writing.

Philler, Theresa A., Ruth K. Hersch, and Helen V. Carson. An Annotated Bibliography on Technical Writing, Editing, Graphics, and Publishing, 1950-1965. Society of Technical Writers and Publishers, Inc. and the Carnegie Library of Pittsburgh, 1966. Abstracts of 1500 articles and 500 books; permuted subject index, author index, list of periodicals represented.

Walter, John A. "Basic Recommended Reference Shelf: A Selected Bibliography of Technical and Scientific Writing." Handbook of Technical Writing Practices, vol. 2, ed. by Stello Jordan. Wiley-Interscience in cooperation with the Society for Technical Communication, 1971, pp. 1295-1303. Lists 143 books with more than nominal merit. Entries classified as encyclopedias and dictionaries; grammar, usage, and style; professional production; technical illustration and graphics; the technical and scientific report; technical writing; readings in technical writing; technical writing casebooks; business letters and reports.

Walter, John A. "Style Manuals." Handbook of Technical Writing Practices, vol. 2, pp. 1267-1273. Article on uses and types of style manuals with representative list of general, institutional, and industrial manuals.

Workun, Authur E. "Speech for the Technician: A Bibliography." Journal of Technical Writing and Communication, Fall 1974, 331-339. Selected for applicability and timelessness; 179 items, both articles and books.

SELECTED ARTICLES ON TEACHING TECHNICAL WRITING

Ends


Britton, W. Earl. "The Trouble with Technical Writing is Freshman English." Journal of Technical Writing and Communication, Spring 1974, 127-131. Argues for required tech writing in the senior year instead of required essay writing in the freshman year, on the basis of the precision required.

Douglas, George H. "The Common Diseases of Technical Writing." Journal of Technical Writing and Communication, Winter 1974, 37-46. Really seven symptoms of the underlying disease, which Douglas calls anemia of the will. The cure lies in treating writing as a respectable intellectual discipline.

Estrin, Herman A. "Teaching English to Engineering and Science Students." Improving College and University Teaching, Autumn 1964, 249-253. Purposes, texts, approaches used in the English courses offered by 55 engineering colleges.

Estrin, Herman A. "Engineering Alumni Advice to Freshmen on Studying English." College English, November 1959, 98-99. Brief quotations, good for the morale of teachers and students.

Harris, John Sterling. "So You're Going to Teach Technical Writing: A Primer for Beginners." The Technical Writing Teacher, Fall 1974, 1-6. The basic questions a new teacher finds himself asking, with answers from an experienced teacher familiar with standard strategy.

Jordan, Michael P. "New Directions in Teaching Technical Report Writing." Journal of Technical Writing and Communication, Third Quarter 1975, 199-205. Technical writing differs from nontechnical writing in its emphasis on quantification, precision, completeness, explicit logic, credibility, and objectivity. Implications for teaching.

MacIntosh, F. H. "Teaching Writing for the World's Work." Teaching English in the Two-Year College, Fall 1975, 6-14. Addresses the division in English departments between literature and practical communication; argues for the intellectual respectability and economic necessity of embracing the latter.

Reubens, John B. "Challenge: Good Scientific Writing." IEEE Transactions on Engineering Writing and Speech, December 1965, 48-55. An argument addressed to scientists and engineers on the need for good writing and the causes of bad writing. Puts "our" concerns into "their" terms.

Rogers, Raymond A. "How to Organize a Research Report for Management." Technical Communication, First Quarter 1973, 7-9. Argues for order of importance rather than order of occurrence or of logic; this approach is now generally accepted in government and industry.

Sawyer, Thomas M. "Rhetoric in an Age of Science and Technology." College Composition and Communication, December 1977, 390-398. On the growing social need for serious popular exposition of science and technology; the role of rhetoric and of the composition teacher in meeting this need.

Smith, Frank R. "Education for Proposal Writers." Journal of Technical Writing and Communication, Second Quarter 1976, 113-122. The role of the technical writer as language specialist; the need for practical training in team writing, dictating, typography, supervision, etc.

Souther, James W. "What Management Wants in the Technical Report." Journal of Engineering Education, April 1962, 498-503. The reading habits and information needs of management suggest responsibility guidelines for both manager and writer.

Sparrow, W. Keats. "Six Myths about 'Writing for Business and Industry.'" The Technical Writing Teacher, Winter 1976, 49-59. The apprehensions of the teacher new to technical writing are often due to misapprehensions about the nature of the course, the students, and the material.

Uris, Auren. "How to Communicate with Managers." Industrial Research, April 1970, 56, 60, 62. The different languages and roles of scientists and managers: successful communication between them requires cross-disciplinary awareness.

Whitburn, Merrill. "Technical Communication: An Unexplored Area for English." Association of Departments of English Bulletin, May 1975, 11-14. An attempt to change the disparaging attitude of many English faculty about technical writing by showing its importance to students, to society, and to English departments (the economic argument again).

Woodford, F. Peter. "Sounder Thinking Through Clearer Writing." Science, 12 May 1967, 743-745. "Execrable writing is the product of shoddy thinking, of careless condescension, or of pretentiousness. None of these is good for science." Proposes a rigorous course in writing for graduate students in science.

Writer's Digest, Special Section: Technical Writing. "Keep It Simple, Keep It Clear," by Ronald Crowe and "How I Buy at TAB," by Ken Sessions. October 1975, 14-20. Perspective on technical writing for the publishing market by a writer and an editor.

Zappen, James P. "Francis Bacon and the Rhetoric of Science." College Composition and Communication, October 1975, 244-247. Bacon's theory of communication anticipates a broad modern definition of scientific and technical writing, encompassing epistemology and psychology as well as style.

Methods

Andrews, Deborah C. "An Interdisciplinary Course in Technical Communication." Technical Communication, First Quarter 1976, 12-15. A joint course in metallurgical engineering and English helps students learn writing where they think it counts and gives them credit for both subjects.

Ballantyne, Ver Don W. "Syllabus for English 215: Exposition and Report Writing, Brigham Young University." The Technical Writing Teacher, Winter 1976, 60-83. Complete syllabus for the sophomore-level course from a well established program; conceptually integrated with goals of liberal arts education.

Bragg, Lawrence. "The Art of Talking about Science." Science, 30 December 1966, 1613-1616. The basic character of a "talk" and how it differs from a "paper;" advice on delivery based on the emotional contact essential to a talk.

Brown, Robert L. and William E. McCarron. "Writing Technical Reports for an Uninformed Audience." The Technical Writing Teacher, Fall 1975, 1-7. Five techniques used at the USAF Academy which help students appreciate an audience they may not have much sympathy with at first.

Burling, Robbins. "An Anthropologist Among the English Teachers." College Composition and Communication, October 1974, 234-242. How he didn't learn

to write in freshman English and how he did learn from an editor; implications and many specific suggestions for the teaching of practical writing in college.

Carson, David L. and John B. McTasney. "Grading Technical Reports with the Cassette Tape Recorder: the Results of a Test Program at the United States Air Force Academy." Journal of Technical Writing and Communication, Spring 1973, 131-144. Student response was enthusiastic and instructors could be more precise and helpful in the same amount of time as written critiques.

Corey, Robert L. "The Persuasive Technical Proposal: Rhetorical Form and the Writer." Technical Communication, Fourth Quarter 1975, 2-5. Sentence and paragraph style appropriate to the persuasive nature of the technical proposal.

Estrin, Herman A. "An Engineering Report Writing Course That Works." Improving College and University Teaching, Winter 1968, 28-30. Basic design of course and testimonials on the results from students and their technical instructors.

Estrin, Herman A. and Edward J. Monahan. "Effective Oral Presentation of Scientific Information." Journal of Technical Writing and Communication, Third Quarter 1975, 187-198. Detailed and explicit instructions for engineering and science students cover preparation, delivery, and use of visual aids.

Fear, David E. "Notes on Coping with Heterogeneous Community College Technical Writing Classes." The Technical Writing Teacher, Fall 1974, 17-20. Sources of information for English teachers on the technical subjects of their students.

Kirkman, John. "Compiling Objective Tests of Technical Writing Ability." Technical Communication, Second Quarter 1974, 9-14. An experimental objective test to determine whether this approach is a more valid indicator of technical writing ability than a composition test.

Kirkman, John. "The Unreliability of Traditional Writing Tests." Technical Communication, First Quarter 1974, 10-13. Conceptual argument for the type of testing illustrated in the subsequent article, listed above.

Minor, Dennis E. "An Integrated Technical Writing Course." The Technical Writing Teacher, Fall 1975, 21-24. A course organized around a single long report, with all assignments contributing to it: gathering information, writing the report, and disseminating the information.

Pearsall, Thomas E. Teaching Technical Writing: Methods for College English Teachers. Society for Technical Communication, STC-51-75, 1975, 18pp. Brief and inclusive introduction to assignments, activities, and concepts for a standard course; bibliography.

Sawyer, Thomas M. "External Examiners for Technical Writing Courses." Journal of Technical Writing and Communication, First Quarter 1976, 27-33. How to separate teaching from evaluation, for increased professionalism in composition teaching and an emphasis on effectiveness in students' work.

Schindler, George E., Jr. "Why Engineers and Scientists Write As They Do: Twelve Characteristics of Their Prose." IEEE Transactions on Professional Communication, March 1975, 5-10. Explains and illustrates twelve stylistic characteristics as an aid to evaluating and improving technical writing.

Smith, Frank R. "Use Rhetoric for Better Technical Proposals." Technical Communication, Third Quarter 1975, 12-14. Simple and effective ways of emphasizing the important ideas, even under deadline pressure.

Stevenson, Dwight W. and J. C. Mathes. "Technical Writing: New Name or New Course?" Teaching English in the Two-Year College, Fall 1975, 15-19. Much of the conventional wisdom of freshman English is inappropriate in technical writing; teachers must retrain themselves when moving from the former to the latter.

Stratton, Charles R. "A Project Team Approach to Technical Writing in the Classroom." Technical Communication, Second Quarter 1973, 9-11. Rather than learning self-expression by writing individual term papers, students learn communication by working in teams on real projects for the campus community.

Walter, John A. "Confessions of a Teacher of Technical Writing." The Technical Writing Teacher, Fall 1973, 3-9. Sage advice for the new teacher from one who has been at it for over 25 years.

Resources

Chemical Engineering. "Write Well and Win Recognition." 22 December 1975, 40-52 (reprint no. 239). Three articles, by technical writers and editors Edward A. Hine, Vincent Vinci, and Roy B. Hughson, on the basics of style, organization, and publication for engineers.

Cunningham, Donald H. "Toward a Comprehensive Bibliography of Technical Writing." Journal of Technical Writing and Communication, Winter 1973, 39-45. The uses of a bibliography for teacher, student, and practitioner; four areas in technical writing that need further scholarly research.

Davis, Richard M. "Experimental Research in the Effectiveness of Technical Writing." IEEE Transactions on Engineering Writing and Speech, December 1967, 33-38. An experimental method for determining whether a given element of a communication contributes to its effectiveness within a given situation; details of one experiment and results.

Goldberg, Jay J. "A Survey of Scholarly Works in Technical Writing." Technical Communication, First Quarter 1975, 5-8. Covers work from 1965-1973; the research is in three main areas: readability, profiles of the profession, and information transfer and retrieval.

Miller, Walter James. "What Can the Technical Writer of the Past Teach the Technical Writer of Today?" IRE Transactions on Engineering Writing and Speech, December 1961, 69-76. A discussion of twelve technical writers, each important for how he wrote as well as for what he said; from early Roman writers through contemporary Americans.

Minor, D. E. and L. F. Lynde. "Library Resource Materials for Technical Writing." The Technical Writing Teacher, Spring 1976, 135-143. A bibliography of scientific and engineering reference works for the instructor who lacks the technical background to help students find research material.

Pearsall, Thomas E. "Current University Programs in Technical Communication." Technical Communication, First Quarter 1975, 16-18. Basic curriculums, internships, career opportunities for graduates, and research needed were discussed at a conference for directors of technical communication programs.

Pearsall, Thomas E., ed. "University Programs in Technical Communication." Technical Communication, First Quarter 1973, 2-6. Articles by Frederick Van Veen, John H. Mitchell, and James H. Lufkin from a panel at the 1972 International Technical Communications Conference; how students are being trained and how they should be trained to become professional technical writers.

Sawyer, Thomas M. "Technical Writing, Scientific Books, and the Culture Gap." Proceedings of the 17th International Technical Communications Conference, Minneapolis, 1970, E5-2. Scientific books may help scientific and technical writers bridge the gap between technological and literary cultures; annotated bibliography.

Warren, Thomas, L. "Technical Writing Textbook Selection." The Technical Writing Teacher, Fall 1974, 21-27. Major and minor considerations to make in choosing a text and a quick look at some recent texts.

STANDARD WORKS ON TECHNICAL WRITING

Cunningham, Donald H. and Herman A. Estrin. The Teaching of Technical Writing. National Council of Teachers of English, 1975. An anthology of 24 articles on the central concerns of courses in technical and scientific writing; bibliography.

Estrin, Herman A., ed. Technical and Professional Writing: A Practical Anthology, reprinted. Preston Publishing Co., 1976. A supplementary text containing 44 articles from a wide variety of sources and authors; covers planning, writer's tools, sentence mechanics, streamlining vs. amplification, audience adaptation; bibliography.

Gould, Jay R. and Wayne A. Losano. Opportunities in Technical Writing Today. Vocational and Guidance Manuals, 1975. Discusses the technical writing profession, qualifications required, education and training programs, and job opportunities and salaries in government and industry.

Jordan, Stello, ed. Handbook of Technical Writing Practices, 2 vols. Wiley-Interscience and Society for Technical Communication, 1971. A compendium (32 articles) on the profession, with sections on types of publications, support services, management, and reference works.

Kapp, Reginald O. The Presentation of Technical Information, 2nd edition. Constable and Co., Ltd. (10 Orange St., London WC 2, H 7 EG), 1973. A classic on what Functional English is and how it works.

Menzel, Donald H., Howard Mumford Jones, and Lyle G. Boyd. Writing a Technical Paper. McGraw-Hill, 1961. A brief, interesting, and sympathetic discussion by a scientist, a professor of English, and a technical editor.

Rathbone, Robert R. Communicating Technical Information. Addison-Wesley Publishing Co., 1966. A self-improvement guide for engineers and scientists; used in the MIT summer conference of the same name; annotated bibliography.

Society for Technical Communication. Proposals . . . and Their Preparation. STC Anthology Series No. 1 (STC-33-73), 1973. Articles from Technical Communication and papers from ITCC on one of the more crucial types of technical writing.

Society for Technical Communication. Technical Editing: Principles and Practices. STC Anthology Series No. 4 (STC-54-75), 1975. Articles and papers that present a broad and flexible view of editing; bibliography.

Society for Technical Communication. Teaching Technical Writing and Editing: In-House Programs That Work. STC Anthology Series No. 5 (STC-67-76), 1976. Twelve articles and papers cover preliminary considerations, development of training programs, diverse and specialized courses.

Tichy, H. J. Effective Writing for Engineers, Managers, Scientists. John Wiley and Sons, 1966. Detailed and literate, based on years of consulting and lecturing for industry.

Woodford, F. Peter, ed. Scientific Writing for Graduate Students: A Manual on the Teaching of Scientific Writing. Rockefeller University Press, 1968. Detailed plan for an advanced course, chapters on tables and figures, Ph.D. theses, oral presentations, and literature searches; annotated bibliography.

GENERAL ORIENTATION MATERIAL

Adams, James L. Conceptual Blockbusting: A Guide to Better Ideas. W. H. Freeman and Co., 1974. How the mind approaches the problem of solving problems; problems in design and engineering are remarkably similar to problems in writing.

Asimov, Isaac. Just about any nonfiction work; puts science into terms that anyone can understand. The Genetic Code, The Human Body, Inside the Atom, Life and Energy, Understanding Physics, etc.

Baker, Robert A., ed. A Stress Analysis of A Strapless Evening Gown and Other Essays for a Scientific Age. Doubleday Anchor Book, 1969. The point of scientific humor and satire is often the way scientists write and talk.

Beveridge, W. I. B. The Art of Scientific Investigation. Vintage Books, 1959. A classic on scientific method and the psychology of science.

Bronowski, J. Science and Human Values, rev. ed. Harper and Row, 1965. Creativity, truth, and human dignity as values inherent in the scientific enterprise.

Deason, Hilary J., ed. The AAAS Science Book List, 3rd edition. American Association for the Advancement of Science, 1970. Annotated listing of 2441 well written and scientifically accurate books arranged according to the Dewey decimal system; author and title indexes.

Dieterich, Daniel, ed. Teaching About Doublespeak. National Council of Teachers of English, 1976. An anthology of articles on a problem which is part of much technical and professional writing.

Eiseley, Loren. Just about anything by this writer on anthropology and, more generally, the scientific urge. The Immense Journey, Darwin's Century, The Firmament of Time, The Unexpected Universe, etc.

Harrison, James, ed. Scientists as Writers. The M.I.T. Press, 1965. Forty-six prose passages about science by scientists; cover most of the important concepts in modern science; organized as a supplementary textbook.

International Paper Company. Pocket Pal: A Graphic Arts Production Handbook, 11th edition. 1974. An industry standard; complete guide to typesetting, photography and color, and printing.

Nelms, Henning. Thinking with a Pencil. Barnes and Noble, 1964. Using the visual medium to learn, think, and communicate; several chapters on presenting numerical data and abstract concepts in visual form.

Pirsig, Robert M. Zen and the Art of Motorcycle Maintenance. Bantam, 1975. The place of technical writing (among other phenomena) in modern culture, and why; required reading.

Snow, C. P. The Two Cultures and the Scientific Revolution. Cambridge University Press, 1961. "What is acceleration?" is the scientific equivalent of "Can you read?" The famous essays on the communication gap which the technical writing teacher is likely to be in the middle of.

Turnbull, Arthur T. and Russell N. Baird. The Graphics of Communication: Typography, Layout, Design, 3rd edition. Holt, Rinehart and Winston, 1975. From communication theory through design to production processes; a basic textbook that covers many areas of concern to the professional communicator.

The Way Things Work: An Illustrated Encyclopedia of Technology, 2 vols. C. van Amerongen, trans. Simon and Schuster, 1967, 1972. One-page explanations of modern processes and devices, from anesthesia to xerography, ballpoint pens to zippers.

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